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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/575,053

**Applicant(s)**

VETELAINEN ET AL.

**Examiner**

SHERROD KEATON

**Art Unit**

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

### **DETAILED ACTION**

This action is in response to the filing of 12-07-09. Claims 1-29 are pending and have been considered below:

#### ***Response to Arguments***

Applicant's arguments filed have been fully considered but they are not persuasive. Jaeger clearly discloses the swap functionality of content. However does not use a drag and drop functionality to perform this operation. Jaeger does however disclose that the invention has the ability to execute a drag and drop function. Drag and Drop is a well known technique for transferring data, and would be obvious and well within reach of implementation of a system that already incorporates drag and drop. Astala also discloses the dragging of content from one location to the next and therefore would be obvious to further enhance the swap functionality found in Jaeger.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2 and 12-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over in Jaeger, US 6883145 B2 in view of Astala, US 6,590,568.

Regarding **Claim 1**, Jaeger discloses shifting a first shortcut key with its attached content and functionality to become the content and functionality of a second shortcut key; and

shifting the second shortcut key with its attached content and functionality to become the content and functionality of the first shortcut key in one action on a display of an electronic apparatus (Jaeger: Column 16, Lines 5-20). Jaeger discloses a drag and drop to perform a switch operation so it is well understood that drag and drop is a practical option within the invention (Column 9, Lines 54-59) but does not explicitly disclose performing one drag and drop operation from the first shortcut key to the second

shortcut key using a user interface of the electronic apparatus. However Astala is directed toward making a drag and drop operation, wherein a method and apparatus for dragging and dropping items displayed on a touch screen and the item on the touch screen is touched with a pressure greater than a first predetermined pressure for a first predetermined period of time. The pressure on the item is then reduced, and the item is dragged with the reduced pressure to a second location at which the touch screen is touched with a pressure greater than a second predetermined pressure for a time duration greater than a second predetermined time period. (Astala, See Abstract, lines 1-8). Additionally, Astala discloses that the item on the touch screen is touched with a pressure greater than a predetermined pressure for a first predetermined period of time, and then the touch screen is touched at a second location with a pressure greater than the predetermined pressure for a second predetermined period of time, less than the first predetermined period of time. (Astala, See Abstract, lines 9-16). Drag and Drop is an established and well known operation for transferring data, Jaeger provides the swap functionality of content. Astala is provided because it further provides evidence that dragging and dropping content from one location to another is known. Considering that Jaeger already discloses the swap functionality and incorporates drag and drop in the invention it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate the drag operation of Astala into the drag and swap operation found in Jaeger. One would have been motivated to provide this functionality as an alternative technique or enhancement of the swap functionality of content by taking advantage of the convenience of drag and drop.

and wherein a drag and drop operation from the first shortcut key somewhere else on the display other than to the second shortcut key cancels the shifting of the content and functionality of the first shortcut key (Jaeger: Column 9, Lines 54-61). It is understood that if user does not drag content to the folder or switch (somewhere else) the operation will not be performed (this is considered a cancel functionality).

Regarding **Claim 2**, most of the limitations have been met in the rejection of Claim 1. See the rejection of Claim 1. Astala discloses the claimed aspect of one wherein of the following the electronic apparatus is embodied on one of: a cellular network terminal, a PC, a portable computer or a palm computer in FIG. 3, FIG. 4 and FIG. 5, wherein a mobile terminal and MDA (Mobile Display Appliance) system are illustrated and (Jaeger: Column 17, Lines 15-19).

Regarding **Claim 12**, most of the limitations have been met in the rejection of Claim 1. See the rejection of Claim 1 for details. Jaeger discloses the shifted functionality comprises a functionality programmed into the electronic apparatus (abstract). Jaeger discloses a programmed system therefore functionality is programmed within the system.

Regarding **Claim 13**, The rejection for Claim 1 applies to Claim 13. See rejection details for Claim 1.

Regarding **Claim 14**, most of the limitations have been met in the rejection of Claim 13. See the rejection of Claim 13 for details. Astala further discloses the claimed aspect of the first shortcut key is selected to become shifted by pressing the touch screen with an object at the first shortcut key, wherein a touch screen technique is provided for an electronic device in which the location and the time duration of an object, such as a finger or stylus or other pointed object is used and contacting or pressing a detection point on the touch screen, are detected. (Astala, Page 2, Paragraph 20, lines 1-5). More specifically, Astala discloses that the pressure and velocity could be of a finger or other object contacting the touch screen. (Astala, Page 2, Paragraph 5, lines 5-8).

Regarding **Claim 15**, most of the limitations have been met in the rejection of Claim 14. See the rejection of Claim 14 for details. Astala further discloses the claimed aspect of wherein the content and functionality of the first shortcut key is configured to be changed to become the content and functionality of the second shortcut key by moving the object used for selecting on the touch screen from a position above the first shortcut key to a position above the second shortcut key, where raising of the object from the touch screen is configured to initiate the shifting of the content and functionality of the first shortcut key to become the content and functionality of the second shortcut key in FIGURES 6a-d, wherein specifically FIG. 6c illustrates the second touch input 736 being made over the image of directory 2 in window 730. At step 718, the x and y coordinates of the second touch input 736 are determined, and at step 720, the object

of the second touch, that is, the selected item of the second touch, is determined to be directory 2. At step 722, the object of the first touch input, that is, file 1, is then moved to the object of the second touch input, that is, directory 2. The process is then ended at step 724. FIG. 6d illustrates that file 1 has been moved from directory 3. (Astala, Page 9, Paragraphs 55-60). Jaeger provides the functionality of switching the content and functionality as previously cited.

Regarding **Claim 16**, most of the limitations have been met in the rejection of Claim 14. See the rejection of Claim 14 for details. Astala further discloses the claimed aspect of the functionality attached to the first shortcut key is configured to be executed when the object used to select the first shortcut key is raised from the touch screen above the first shortcut key, wherein in order to retrieve information or to request services from the MDA server 28 or the Internet 26, the user might utilize the input touch screen 70. The user can provide input using a virtual keyboard displayed on the display 70, using keyboard 72, or through the touch screen input on the touch screen 70 utilizing various processes and functions according to the embodiments of the invention. Even though the virtual keyboard may be used as the user retrieves information from the Internet 26, such as a web page, the user can receive the information at the display 70 of the terminal 20 in a full screen format. Full screen format is available because the virtual keyboard disappears when the user types a Universal Resource Locator (URL) or follows a hyperlink while navigating the Internet 26. In order to return to the virtual



keyboard, the user presses a button 80, and the virtual keyboard as well as the header and footer related to the services are presented again. Additionally, once the user presses the button 80, the web page, which was a full screen display prior to pressing the button 80, is reduced to a thumbnail view and positioned in the display 70, such as in the bottom left corner of the footer. Consequently, the user has a shortcut to quickly access the web page that was previously visited or to save that web page as a bookmark. (Astala, Page 7, Paragraphs 5-25).

Regarding **Claim 18**, most of the limitations have been met in the rejection of Claim 13. See the rejection of Claim 13 for details. Jaeger discloses the shifted functionality comprises a functionality programmed into the electronic apparatus which is defined to be executed by a shortcut key (abstract). Jaeger discloses a programmed system therefore functionality is programmed within the system which will relate to an object.

Regarding **Claim 19**, The rejection for Claim 1 applies to Claim 19. See rejection details for Claim 1.

Regarding **Claim 20**, most of the limitations have been met in the rejection of Claim 19. See the rejection of Claim 19 for details. Astala further discloses the claimed aspect of the electronic apparatus is further caused to form and display a shortcut menu

with at least two shortcut keys with interchangeable contents and functionality, wherein a method and apparatus for dragging and dropping items displayed on a touch screen and the item on the touch screen is touched with a pressure greater than a first predetermined pressure for a first predetermined period of time. The pressure on the item is then reduced, and the item is dragged with the reduced pressure to a second location at which the touch screen is touched with a pressure greater than a second predetermined pressure for a time duration greater than a second predetermined time period. Additionally, Astala discloses that the item on the touch screen is touched with a pressure greater than a predetermined pressure for a first predetermined period of time, and then the touch screen is touched at a second location with a pressure greater than the predetermined pressure for a second predetermined period of time, less than the first predetermined period of time. (Astala, See Abstract).

Regarding **Claim 21**, most of the limitations have been met in the rejection of Claim 19. See the rejection of Claim 19 for details. Jaeger discloses the shifted functionality comprises a functionality programmed into the electronic apparatus which is defined to be executed by a shortcut key (abstract). Jaeger discloses a programmed system therefore functionality is programmed within the system which will relate to an object.

Regarding **Claim 22**, most of the limitations have been met in the rejection of Claim 21. See the rejection of Claim 21 for details. Astala further discloses the claimed aspect

of one of following: a cellular network terminal, a portable computer or a palm computer in FIG. 3, FIG. 4 and FIG. 5, wherein a mobile terminal and MDA (Mobile Display Appliance) system are illustrated and (Jaeger: Column 17, Lines 15-19).

Regarding **Claim 23**, The rejection for Claim 1 applies to Claim 23. See rejection details for Claim 1(touch screen provided in Astala).

Regarding **Claim 24**, most of the limitations have been met in the rejection of Claim 23. See the rejection of Claim 23 for details. Astala further discloses the claimed aspect of program embodied in a portable device, and executable to shift the shortcut keys in a shortcut menu created on a touch screen, of the portable device in FIG. 3, FIG. 4 and FIG. 5, wherein a mobile terminal and MDA (Mobile Display Appliance) system are illustrated.

Regarding **Claim 25**, most of the limitations have been met in the rejection of Claim 23. See the rejection of Claim 24 for details. Astala further discloses the claimed aspect of a selecting of a first shortcut key, whereby the selection is made by pressing the touch screen with an object, wherein a touch screen technique is provided for an electronic device in which the location and the time duration of an object, such as a finger or stylus or other pointed object is used and contacting or pressing a detection

point on the touch screen, are detected. (Astala, Page 2, Paragraph 20, lines 1-5). More specifically, Astala discloses that the pressure and velocity could be of a finger or other object contacting the touch screen. (Astala, Page 2, Paragraph 5, lines 5-8).

Astala discloses the claimed aspect of a detecting whether the object is raised from the touch screen at a position of the selected first shortcut key and a detection of a movement of the object on the surface of the touch screen away from the position above the first shortcut key, and when the object is not raised at the position of the selected first shortcut key further comprising, wherein in order to retrieve information or to request services from the MDA server 28 or the Internet 26, the user might utilize the input touch screen 70. The user can provide input using a virtual keyboard displayed on the display 70, using keyboard 72, or through the touch screen input on the touch screen 70 utilizing various processes and functions according to the embodiments of the invention. Even though the virtual keyboard may be used as the user retrieves information from the Internet 26, such as a web page, the user can receive the information at the display 70 of the terminal 20 in a full screen format. Full screen format is available because the virtual keyboard disappears when the user types a Universal Resource Locator (URL) or follows a hyperlink while navigating the Internet 26. In order to return to the virtual keyboard, the user presses a button 80, and the virtual keyboard as well as the header and footer related to the services are presented again. Additionally, once the user presses the button 80, the web page, which was a full screen display prior to pressing the button 80, is reduced to a thumbnail view and positioned in the display 70, such as in the bottom left corner of the footer.

Consequently, the user has a shortcut to quickly access the web page that was previously visited or to save that web page as a bookmark. (Astala, Page 7, Paragraphs 5-25).

Astala discloses the claimed aspect of a detecting a movement whether the object is raised from the surface of the touch screen at a position of a the second shortcut key in FIGURE 6a, wherein at step 704 At step 704, a timer is started upon the detection of the object pressing the touch screen 70, and at step 706, the x and y coordinates of the touch input 732 are read. That is, the location of the object at its contact point with the touch screen 70 is determined. (Astala, Page 9, Paragraph 20). As next at step 714, a determination that a drag operation is occurring may be discerned by detecting changes in the x and y coordinates over a predetermined period of time while allowing for discontinuities in the pressure of the object on the touch screen caused by momentary lifting of the object from the face of the touch screen 70 during the drag operation. (Astala, Page 9, Paragraph 40, lines 4-9).

Astala discloses the claimed aspect of if the object is raised then interchanging the content and functionality of the first shortcut key and the content and functionality of the second shortcut key in FIGURE 6a-d, wherein specifically FIG. 6c illustrates the second touch input 736 being made over the image of directory 2 in window 730. At step 718, the x and y coordinates of the second touch input 736 are determined, and at step 720, the object of the second touch, that is, the selected item of the second touch, is determined to be directory 2. At step 722, the object of the first touch input, that is, file 1, is then moved to the object of the second touch input, that is, directory 2. The

process is then ended at step 724. FIG. 6d illustrates that file 1 has been moved from directory 3. (Astala, Page 9, Paragraphs 55-60). Jaeger provides the functionality of switching the content and functionality as previously cited.

Regarding **Claim 26**, most of the limitations have been met in the rejection of Claim 25. See the rejection of Claim 25 for details. Astala further discloses the claimed aspect of the functionality attached to the first shortcut key when the object is raised from the touch screen at the position of the first shortcut key, wherein in order to retrieve information or to request services from the MDA server 28 or the Internet 26, the user might utilize the input touch screen 70. The user can provide input using a virtual keyboard displayed on the display 70, using keyboard 72, or through the touch screen input on the touch screen 70 utilizing various processes and functions according to the embodiments of the invention. Even though the virtual keyboard may be used as the user retrieves information from the Internet 26, such as a web page, the user can receive the information at the display 70 of the terminal 20 in a full screen format. Full screen format is available because the virtual keyboard disappears when the user types a Universal Resource Locator (URL) or follows a hyperlink while navigating the Internet 26. In order to return to the virtual keyboard, the user presses a button 80, and the virtual keyboard as well as the header and footer related to the services are presented again. Additionally, once the user presses the button 80, the web page, which was a full screen display prior to pressing the button 80, is reduced to a thumbnail view and

positioned in the display 70, such as in the bottom left corner of the footer.

Consequently, the user has a shortcut to quickly access the web page that was previously visited or to save that web page as a bookmark. (Astala, Page 7, Paragraphs 5-25).

Regarding **Claim 27**, most of the limitations have been met in the rejection of Claim 25. See the rejection of Claim 25 for details. Astala further discloses the claimed aspect of cancelling the shifting of the content and functionality of the first shortcut key when the object is raised from the touch screen in an area, which is not defined to belong to a shortcut key in FIGURE 6a, wherein at step 704 at step 704, a timer is started upon the detection of the object pressing the touch screen 70, and at step 706, the x and y coordinates of the touch input 732 are read. That is, the location of the object at its contact point with the touch screen 70 is determined. (Astala, Page 9, Paragraph 20). As next at step 714, a determination that a drag operation is occurring may be discerned by detecting changes in the x and y coordinates over a predetermined period of time while allowing for discontinuities in the pressure of the object on the touch screen caused by momentary lifting of the object from the face of the touch screen 70 during the drag operation. (Astala, Page 9, Paragraph 40, lines 4-9). Applicant should duly note that the system needs to determine the coordinates of the shortcut keys. Furthermore raising an object or unclicking the mouse during a drag operation cancels the shifting of the content of any shortcut key. (Microsoft Office Products).

Regarding **Claim 28**, Jaeger discloses the shifted functionality comprises a functionality programmed into the portable device (abstract). Jaeger discloses a programmed system therefore functionality is programmed within the system which will relate to an object.

Regarding **Claim 29**, most of the limitations have been met in the rejection of Claim 28. See the rejection of Claim 28 for details. Astala discloses the claimed aspect of embodied in one of the following devices: a cellular network terminal, a portable computer or a palm computer in FIG. 3, FIG. 4 and FIG. 5, wherein a mobile terminal and MDA (Mobile Display Appliance) system are illustrated and (Jaeger: Column 17, Lines 15-19).

**Claims 3-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaeger, US 6883145 B2 in view of Astala, US 6,590,568 and in further view of Hawkins, US 6,781,575.

Regarding **Claim 3**, most of the limitations have been met in the rejection of Claim 2. See the rejection of Claim 2 for details. Astala discloses in FIG. 3, 4 and 5 a mobile terminal. However, Jaeger does not teach specifically the claimed aspect of a touch screen used as the display unit of the electronic apparatus, and a shortcut menu is created on the touch screen. However, Hawkins discloses the claimed aspect of a



touch screen used as the display unit of the electronic device, whereby a shortcut menu is created on the touch screen in FIGURE 5 and FIGURE 6, wherein new, edit, delete and done options on touch screen are illustrated.

It would be obvious to one ordinary skill in the art at the time of the invention to combine Astala's touch screen drag and drop method, Jaeger's switching concept with Hawkins touch screen organizing elements, because as the size of these communication devices decreases and as the number of functions increases, it has become increasingly important for a user to be able to enter commands and information into the communication device in an efficient manner and with a reduction in size of the device, a keypad input device must also be reduced in size, thereby decreasing the efficiency with which information can be inputted by reducing the number and size of the keys.(Astala, Page 1, Paragraphs 30-35).

Regarding **Claim 4**, most of the limitations have been met in the rejection of Claim 3. See the rejection of Claim 3 for details. Astala further discloses the claimed aspect of wherein the first shortcut key to be shifted is selected to become a shifted shortcut key by pressing the touch screen with the aid of an object at a position of the first shortcut key, wherein a touch screen technique is provided for an electronic device in which the location and the time duration of an object, such as a finger or stylus or other pointed object is used and contacting or pressing a detection point on the touch screen, are detected. (Astala, Page 2, Paragraph 20, lines 1-5). More specifically, Astala discloses

that the pressure and velocity could be of a finger or other object contacting the touch screen. (Astala, Page 2, Paragraph 5, lines 5-8).

Regarding **Claim 5**, most of the limitations have been met in the rejection of Claim 4. See the rejection of Claim 4 for details. Astala further discloses the claimed aspect of wherein the content of the first shortcut key is shifted to become the content of the second shortcut key by moving the object used in the selection on the touch screen from a position above the first shortcut key to a position over the second shortcut key, where the object is raised from the touch screen, whereby the raising of the object initiates the shifting of the content of the first shortcut key to become the content of the second shortcut key in FIGURE 6a-d, wherein specifically FIG. 6c illustrates the second touch input 736 being made over the image of directory 2 in window 730. At step 718, the x and y coordinates of the second touch input 736 are determined, and at step 720, the object of the second touch, that is, the selected item of the second touch, is determined to be directory 2. At step 722, the object of the first touch input, that is, file 1, is then moved to the object of the second touch input, that is, directory 2. The process is then ended at step 724. FIG. 6d illustrates that file 1 has been moved from directory 3. (Astala, Page 9, Paragraphs 55-60); Jaeger provides the functionality of switching the content and functionality as previously cited.

Regarding **Claim 6**, most of the limitations have been met in the rejection of Claim 4. See the rejection of Claim 4 for details. Astala further discloses the claimed

aspect of a functionality attached to the first shortcut key is executed when the object used to select the first shortcut key is raised from the touch screen above the first shortcut key, wherein in order to retrieve information or to request services from the MDA server 28 or the Internet 26, the user might utilize the input touch screen 70. The user can provide input using a virtual keyboard displayed on the display 70, using keyboard 72, or through the touch screen input on the touch screen 70 utilizing various processes and functions according to the embodiments of the invention. Even though the virtual keyboard may be used as the user retrieves information from the Internet 26, such as a web page, the user can receive the information at the display 70 of the terminal 20 in a full screen format. Full screen format is available because the virtual keyboard disappears when the user types a Universal Resource Locator (URL) or follows a hyperlink while navigating the Internet 26. In order to return to the virtual keyboard, the user presses a button 80, and the virtual keyboard as well as the header and footer related to the services are presented again. Additionally, once the user presses the button 80, the web page, which was a full screen display prior to pressing the button 80, is reduced to a thumbnail view and positioned in the display 70, such as in the bottom left corner of the footer. Consequently, the user has a shortcut to quickly access the web page that was previously visited or to save that web page as a bookmark. (Astala, Page 7, Paragraphs 5-25).

**Claims 8-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaeger, US 6883145 B2 in view of Astala, US 6,590,568 and in further view of Leavitt et al., US 20020085037.

Regarding **Claim 8**, most of the limitations have been met in the rejection of Claim 2. See the rejection of Claim 2 for details. Jaeger does not teach the claimed aspect of first shortcut key is selected to become shifted by selecting it among the shortcut keys on the display of the electronic apparatus with a button of a mouse belonging to the user interface of the electronic apparatus. However, Leavitt discloses the claimed aspect of first shortcut key is selected to become shifted by selecting it among the shortcut keys on the display of the electronic device with the button of a mouse belonging to the user interface of the electronic device, wherein a cursor-based computing environment with a display and a user definable interface (UDI) is displayed upon activation by a user. UDI has a plurality of buttons and is displayed in a relative position about a cursor position to reduce cursor commute. Leavitt discloses that the user to select a visual appearance and shape of the UDI, and the number of buttons. More specifically, this technique allows users to assign a command to each of the plurality of buttons by dragging and dropping from one or more applications of the apparatus. (Leavitt, See Abstract, Paragraph 13 and 56).

It would be obvious to one of ordinary skill in the art at the time of the invention to combine Astala's touch screen technique, Jaeger's switching concept with Leavitt's

cursor-based drag input technique, because it would allow the users to have different mode of drag system.

Regarding **Claim 9** most of the limitations have been met in the rejection of Claim 8. See the rejection of Claim 8 for details. Leavitt further discloses the claimed aspect of a content and functionality of the first shortcut key is shifted to become a content and functionality of the second shortcut key by moving a cursor connected to the mouse on the display of the electronic apparatus from a position above the first shortcut key to a position above the second shortcut key, where the mouse button is released, whereby the releasing of the mouse button initiates the shifting of the content and functionality of the first shortcut key to become the content and functionality of the second shortcut key, wherein users can click and drag shortcuts from the Windows desktop or Windows Explorer to a Zenu.TM. button of the present invention. This will cause the button to have the same action as the shortcut. If a file that is not a shortcut is dragged from Windows Explorer to a Zenu.TM. button, the Zenu.TM. UDI will make the button a shortcut pointing to the file that was dragged. For instance, if the user drags a Microsoft.RTM. Word or notepad document onto a Zenu.TM. button, clicking that Zenu.TM. button will now open the document that was dragged onto the button. This overrides the default action of the button defined in the template or theme file as well as user-defined commands. (Leavitt, Page 8, Paragraph 0131). Jaeger provides the functionality of switching the content and functionality as previously cited.

Regarding **Claim 10**, most of the limitations have been met in the rejection of Claim 8. See the rejection of Claim 8 for details. Astala further discloses the claimed aspect of the object used to select the shortcut key is released on the display of the electronic apparatus somewhere else than above a shortcut key, then the initiated shifting of a content and functionality of the first shortcut key is cancelled, wherein in FIGURE 6a, wherein at step 704 at step 704, a timer is started upon the detection of the object pressing the touch screen 70, and at step 706, the x and y coordinates of the touch input 732 are read. That is, the location of the object at its contact point with the touch screen 70 is determined. (Astala, Page 9, Paragraph 20). As next at step 714, a determination that a drag operation is occurring may be discerned by detecting changes in the x and y coordinates over a predetermined period of time while allowing for discontinuities in the pressure of the object on the touch screen caused by momentary lifting of the object from the face of the touch screen 70 during the drag operation. (Astala, Page 9, Paragraph 40, lines 4-9). Astala does not teach the aspect of the mouse button. However, Leavitt discloses the aspect of mouse button in use of drag drop.

It would be obvious to one of ordinary skill in the art at the time of the invention to combine Astala's object aided drag and drop technique, Jaeger's switching concept with Leavitt's mouse button use, because this would allow the users to have a choice to use different mode of drag-drop system. Furthermore it is commonly

known that raising an object or unclicking the mouse during a drag operation cancels the shifting of the content of any shortcut key. (Microsoft Office Products).

Regarding **Claim 11**, most of the limitations have been met in the rejection of Claim 1. See the rejection of Claim 1 for details. However Jaeger does not teach all the claimed aspects therefore Leavitt is provided to disclose the shifting of a shortcut key made on the display of the electronic apparatus further causes the functionality attached to a first key belonging to a physical keyboard of the electronic apparatus to be shifted to a second key of the keyboard, wherein Zenu.TM. 200 permits the user to assign commands to the buttons by dragging and dropping from one or more applications associated with (e.g., capable of running on, or otherwise coupled to) the apparatus. (Leavitt, Page 4, Paragraph 0061, lines 12-15). It would be obvious to one of ordinary skill in the art at the time of the invention to combine Astala's object aided drag and drop technique, Jaeger's switching concept with Leavitt's functionality, because this would allow the users software and hardware options of selection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Carroll, 7017118 B1, 3-21-2006, "Method and apparatus for reordering data items".

#### ***Conclusion***

Applicants amendments necessitated the new ground(s) of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrod Keaton whose telephone number is 571) 270-1697. The examiner can normally be reached on Mon. thru Fri. and alternating Fri. off (EST).



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on 571-272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SLK

3-10-2010

/William L. Bashore/

Supervisory Patent Examiner, Art Unit 2175